

REMARKS

1. Claims 1-34 and 36-38 were pending. Claims 1, 28-33, 36, and 38 have been amended. Claim 34 has been canceled. No new claims have been added. Therefore, claims 1-33 and 36-38 remain pending. Applicants respectfully request reconsideration of the claims in view of the above amendments and the following remarks.

2. The Examiner rejected claims 1, 3-14, 17-20, 25-27, 29-34, and 36-38 under 35 U.S.C. 102(b) as being anticipated by Wolff. The Examiner rejected claims 2, 15-16, 21, and 28 under 35 U.S.C. 103(a) as being unpatentable over Wolff in view of Ravishankar. The Examiner rejected claims 22-23 under 35 U.S.C. 103(a) as being unpatentable over Wolff in view of Hanson. The Examiner rejected claim 24 under 35 U.S.C. 103(a) as being unpatentable over Wolff in view of Hanson and Oracle.

Independent claims 1, 14, 29, 30, 31, 32, 36, 37, and 38 relate generally to techniques for automatically building electronic forms based on data capture definitions, whereas Wolff discloses a technique for displaying a series of forms related to a selected task.

In Wolff, the system determines which of a given series of forms to display when associated with completing a task object (*see* FIG. 3, step 108). As discussed at column 8, lines 5-10 of Wolff, a series of pointers to forms to be used for a particular task results in the forms being "retrieved from memory." Therefore, Wolff's forms are not determined during runtime according to a hierarchical structure of elements defined in a data capture definition file as in the presently claimed invention.

In Wolff's "form generating system" shown in Figure 4, Wolff teaches only that the fields required for a form are determined by pointers to the various "form.field" or "form.segment" objects contained in the object slots. *See* Wolff, col. 9, lines 1-4. The system causes the fields that must be completed to be sequentially "set off or highlighted" for a task to be completed. *See* Wolff, col. 9, lines 14-20. If data is entered that requires additional fields to be filled in, these are displayed. *See* Wolff, col. 9, line 45. The data elements described in Wolff are limited to a single, specific execution purpose. Any additional fields that are to be filled in are merely called up from a previously existing task structure. As stated, the end-user only perceives that he or she is filling out a single form. *See* Wolff, col. 5, line 38. In reality, the hierarchical object oriented programming of Wolff

merely allows multiple forms in different databases to be completed with the same information, but the forms preexist prior to the information being entered.

Thus, Wolff's "form generating system" does not actually generate the forms during runtime and does not teach or otherwise suggest that form layout and physical positioning of user input areas should be determined during runtime. Furthermore, Wolff does not teach that the layout and physical positioning of user input areas in the form is determined by the logical hierarchical structure defined in any data capture definition file, and does not suggest that this should happen for *each* form. The "task map" hierarchical structure of Wolff refers to the sequence of the forms to be filled out. See Wolff, col. 8, lines 13-20. In contrast, the hierarchical structure of the claimed invention is used to automatically determine the layout of the visual displays for each form (see, for example, page 21, lines 1-8).

Additional evidence that Wolff fails to address every claim limitation of the Application be found in Wolff's figures. Figure 6 indicates that a pre-designed layout of display is used, in which the pre-designed form 378 to be displayed is windowed within a larger display 375. See Wolff, Fig. 6. The display 386 also displays a task map 386 that lists the forms that have to be filled out to complete the designated task. *Id.*

Therefore, it can be readily seen that the task 60 of Figure 2 causes to be displayed in window 375 of Figure 6 a *list* of forms (in a *predetermined window layout*) that need to be filled in for a task to be completed. The forms are successively displayed in window 378. The layout and physical positioning of user input areas on each display and form are not determined at runtime but rather have already been determined by the predefined window 375 layout and the predetermined embedded form layout that is inserted into window 378.

It appears that the only runtime configuration of a display that takes place in Wolff is highlighting of fields that are important to the task or which have to be filled in to complete the form for that task. See Wolff, col. 10, line 65 to col. 11, line 3. This is fundamentally different than the presently claimed invention, in which the form layout and physical positioning of the user input areas on each display are determined, during runtime of the data capture process from information in the data capture definition file, in a manner corresponding to the defined logical hierarchical structure.

Independent claims 1, 29, 30, 32, 36, and 38 have been amended to clarify that each visual display has an automatically determined form layout comprising a plurality of user

input areas corresponding to the data elements, in which the form layout and physical positioning of the user input areas on each display are determined, during runtime of the data capture process from information in the data capture definition file, in a manner corresponding to the defined logical hierarchical structure. As discussed above, Applicants respectfully submit that Wolff fails to teach or otherwise suggest these and other claim elements. Applicants further submit that Ravishankar, Hanson, Oracle, and the other references made of reference fail to teach or otherwise suggest at least these claim elements. Thus, Applicants respectfully submit that the pending claims are allowable over Wolff both alone and in combination with Ravishankar, Hanson, and Oracle.

3. The Examiner rejected claim 5 under 35 U.S.C. 112, second paragraph, as being indefinite due to the term "output message format."

Applicants respectfully submit that the expression "output message format" is clear based on the specification as filed. Definiteness of claim language must be analyzed in light of the content of the particular application disclosure. MPEP § 2173.02. In the subject patent application, the data capture file 17 specifies the data elements 13, 103 (e.g. name, address, date of birth, occupation, as shown in figure 10) and their hierarchical structure (e.g. how the elements 103 fall within a section 102 such as personal details or within a subsection 104). This data capture definition file has a predetermined format (e.g. XML), for example, as in claims 1 and 2.

When actual data is captured (e.g. a user enters data corresponding to each of the required data elements), that data has to be formatted according to a data model standard so that it can be used by other systems that adhere to the same data model (see, for example, page 15, line 28 to page 16, line 2 of the subject patent application). The captured data is referred to as the "message" (see, for example, page 25, line 2 of the subject patent application) which is output from the data capture process and has a format that adheres to the data model standard (see, for example, page 15, line 28 to page 16, line 2 of the subject patent application). This clearly defines an "output message format."

4. The Examiner rejected claim 28 under 35 U.S.C. 112, second paragraph, as being dependent upon itself.

Claim 28 has been amended to be dependent upon claim 27.

5. The Examiner objected to the specification as failing to provide proper antecedent basis for a “computer readable medium” in line 2 of claim 33.

As discussed in MPEP 2163, a patent specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. For an original claim, there is a strong presumption that an adequate written description of the claimed invention is present when the application is filed (Applicants note that the original claims are part of the specification and therefore form part of the disclosure). The subject patent application describes a software application 30 that performs various functions associated with the claimed invention. It certainly would have been understood by one of ordinary skill in the art at the time the invention was made that a software application includes computer program code that can be stored on a computer readable medium and loaded onto a computer so as to make the computer execute the programmed functions. Thus, Applicants respectfully submit that the specification provides adequate support for the claim term “computer readable medium.”

Claim 33 has been amended as to form and also to clarify that the computer readable medium is a tangible computer readable medium.

6. The Examiner objected to the specification as failing to provide proper antecedent basis for “electronic data transmission” in lines 1-2 of claim 34.

Claim 34 has been canceled without prejudice.

7. The Examiner objected to claims 29 and 38 for including erroneous text.
Claims 29 and 38 have been amended to remove the erroneous text.

8. As detailed above, Applicant respectfully submits that the pending claims are novel and non-obvious over the prior art. Applicant submits that the present application is in condition for allowance and early notice to that effect is respectfully solicited. If any matters remain outstanding, the Examiner is requested to telephone the undersigned so that they may be resolved expeditiously.

9. Applicant petitions for a two month extension of time. In the event that a further extension is needed, this conditional petition of extension is hereby submitted. Applicant requests that deposit account number 19-4972 be charged for any fees that may be required for the timely consideration of this application.

Respectfully submitted,

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